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**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231*[Handwritten signatures]*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/533, 471	03/23/00	SMITH	D TH-1354 (US)

MMC2/1025

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EXAMINER

THOMAS, C

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 10/25/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)
	09/533,471	SMITH, DAVID RANDOLPH
	Examiner Courtney Thomas	Art Unit 2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 March 2000.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-9 is/are rejected.
- 7) Claim(s) 4 and 8 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: The term micomachines (i.e. p. 1, line 5; p 3. line 11) is ambiguous. The term is either a typo (i.e. micro-machine) or needs further (scientific) explaining.

Appropriate correction is required.

Claim Objections

2. Claims 4 and 8 are objected to because of the following informalities: The term micomachines is ambiguous. The term is either a typo (i.e. micro-machine) or needs further (scientific) explaining. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 5 are rejected under 35 U.S.C. § 102(b) as being anticipated by McClain et al. (U.S. Patent 4,370,098)

5. As per claim 1, McClain et al. disclose a process for measuring and monitoring motor systems (i.e. abstract, column 1, lines 50-63) said process comprising: providing a motor system having at least one component selected from a stator and an armature (i.e. Fig. 1, #5; column 1, lines 25-33), said at least one component connected to at least one electrical wire (i.e. Fig. 1, #6, column 14, lines 61-68); incorporating at least one means for data measurement with said at least

Art Unit: 2882

one electrical wire (i.e. Fig. 1, #s 16-18); collecting data with said at least one means for data measurement (i.e. column 4, lines 25-38); and transferring said collected data to a data collection station (i.e. Fig. 1, #12).

6. As per claim 5, McClain et al. disclose a process for measuring and monitoring motor systems (i.e. abstract, column 1, lines 50-63), said process comprising: providing a motor system having at least one motor component selected from a stator and an armature (i.e. Fig. 1, #5; column 1, lines 25-33), said at least one component connected to at least one electrical wire (i.e. Fig. 1, #6, column 14, lines 61-68); providing at least one means for data measurement (i.e. Fig. 1, #s 16-18); connecting said at least one means for data measurement with said at least one motor component (i.e. Fig. 1); collecting data with said at least one means for data measurement (i.e. column 4, lines 25-38); and transferring said collected data to a data collection station (i.e. Fig. 1, #12).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-4 and 6-9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over McClain et al. (U.S. Patent 4,370,098).

9. As per claims 2-4, McClain et al. do not explicitly disclose a process according to claim one, wherein a) means for measuring data is wrapped around said electrical wire b) means for measuring data is encapsulated and attached to said electrical wire by covering or coating the

Art Unit: 2882

electrical wire and the means for measuring data with an insulating material, and c) means for measuring data is selected from optic fibers, sensors, [micro-machines] and combinations thereof. However, McClain et al. teach a process for measuring and monitoring motor systems, in particular motor systems operating in remotely inaccessible locations (i.e. abstract, column 1, lines 50-63). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of fiber optic (cables, wave guides, etc., or other functionally equivalent means) since it was known in the art that (i.e.) fiber optic (cables) could be used to transfer information (i.e. wavelength dependent) from relatively inaccessible / hazardous locations. Cables (optical, electrical, etc.) would require protective coating/ insulation depending on environmental conditions and/or transmission requirements. Accordingly, such modifications would have been obvious to one having ordinary skill in the art since the claimed limitations do not alter the scope (or spirit) of the disclosed invention (McClain et al.).

10. As per claims 6-9, McClain et al. do not explicitly disclose the arrangement of measuring means contained within a tube or wherein the tube is wound in a motor stator with electrical wire. Additionally, Mc.Clain et al. do not explicitly disclose the composition of measuring means selected from optic fibers, sensors, [micro-machines] and combinations thereof. However, McClain et al. teach a process for measuring and monitoring motor systems, in particular motor systems operating in remotely inaccessible locations (i.e. abstract, column 1, lines 50-63). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the use of fiber optic (cables, wave guides, etc., or other functionally equivalent means) since it was known in the art that (i.e.) fiber optic (cables) could be used to transfer information (i.e. wavelength dependent) from relatively inaccessible / hazardous

Art Unit: 2882

locations. Accordingly, cables (optical, electrical, etc.) would require protective coating/insulation depending on environmental conditions, or transmission requirements.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney Thomas whose telephone number is (703) 306-0473. The examiner can normally be reached on M - F (9 am - 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (703) 305 3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3594 for regular communications and (703) 305-3594 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0530.

Courtney Thomas

October 22, 2001


ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800